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RAILROAD ACCIDENT INVESTIGATION

REPORT NO. 4078

GULF, MOBILE AND OHIO RAILROAD COMPANY

BURKSVILLE, ILL.

MARCH 20, 1966

INTERSTATE COMMERCE COMMISSION

WASHINGTON

H. W. P.

*It appears to me like the Engineer cat napped at
DEC 20 1966 the wrong time.*

SUMMARY

DATE: March 20, 1966

RAILROAD: Gulf, Mobile and Ohio

LOCATION: Burksville, Ill.

KIND OF ACCIDENT: Head-end collision

TRAINS INVOLVED: Freight Freight

TRAIN NUMBERS: 30 Second 31

LOCOMOTIVE NUMBERS: Diesel-electric units 902, 901, 637, 509 Diesel-electric units 614, 636, 630, 622

CONSISTS: 118 cars, caboose 83 cars, caboose

ESTIMATED SPEEDS: Standing 20-25 m.p.h.

OPERATION: Timetable, train orders

TRACK: Single; 2°00' curve; level

WEATHER: Clear

TIME: 4:20 a.m.

CASUALTIES: 1 killed; 3 injured

CAUSE: Failure of the crew of one of the trains to obey a meet order

INTERSTATE COMMERCE COMMISSION
RAILROAD SAFETY AND SERVICE BOARD

RAILROAD ACCIDENT INVESTIGATION

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SYNOPSIS

On March 20, 1966, a head-end collision occurred between two Gulf, Mobile and Ohio Railroad freight trains at Burksville, Ill. One train-service employee was killed and three others were injured.

The accident was caused by failure of the crew of one of the trains to obey a meet order.

LOCATION AND METHOD OF OPERATION

The accident occurred on that part of the Northern Division extending between Tolson and Tamms, Ill., a distance of 130.1 miles. In the accident area this is a single-track line over which trains operate by timetable and train orders. There is no block system in use.

At Burksville, 26.1 miles south of Tolson, a siding 1.6 miles long parallels the main track on the east. The north siding-switch is 800 feet north of the station point.

The collision occurred on the main track, 708 feet south of the Burksville station point and 1,508 feet south of the north siding-switch.

Details concerning the main track, carrier's operating rules, trains involved, damages and other factors are set forth in the appendix.

In the accident area, trees border the railroad right-of-way on the east. Because of these trees and track curvature, the view between opposing trains approaching the accident point is somewhat restricted.

DESCRIPTION AND DISCUSSION

No. 30, a northbound second-class freight train consisting of 4 diesel-electric units, 118 cars and a caboose, left Tamms at 11:50 p.m. the day before the accident. It passed Sparta, the last open train order office, 25.6 miles south of Burksville, at 3:09 a.m., 6 hours 47 minutes late. At Sparta, the crew members received copies of train order No. 16, which read in part as follows:

NO 30 ENG 902 MEET SECOND AND THIRD 31 ENGINES 614
AND 618 AT BURKSVILLE

This order established Burksville as the meeting point for No. 30 with Second and Third 31, southbound second-class freight trains. Under the provisions of the order, Second and Third 31, the inferior trains by timetable directions, were required to enter the Burksville siding at the north switch and clear the main track for No. 30. The order restricted No. 30, the superior train, and required it to stop clear of the north siding-switch at Burksville until Second and Third 31 had entered the siding and cleared the main track. All the crew members of No. 30 read train order No. 16 and understood its requirements.

A few minutes after No. 30 passed Sparta, when it was about three miles south of Burksville, the front brakeman radio-telephoned Second 31 and was informed by the engineer that Second 31 had just passed Waterloo, 5.2 miles north of Burksville. Soon afterward, No. 30, passed the Burksville south siding-switch at 4 or 5 miles per hour and continued northward on the main track, prepared to stop clear of the north siding-switch as required by the provisions of train order No. 16. As the rear of the train passed the south siding-switch, the conductor alighted from the caboose and lined that switch for movement from the siding to the main track, to facilitate the anticipated movement of Second 31 through the siding after meeting No. 30 as required by order No. 16. After moving the south siding-switch to reverse position, the conductor walked toward the rear of his train, which was moving northward on the main track.

As No. 30 was moving slowly toward the Burksville north siding-switch, the engineer and front brakeman saw the headlight of Second 31 come into view a short distance north of the north siding-switch. Soon thereafter, the front brakeman saw that the locomotive of Second 31 had passed the north siding-switch and that it was approaching on the main track at a relatively high rate of speed. He promptly called a warning. At this time, the engineer saw that Second 31 was moving too fast to stop short of a collision, and he applied the brakes of his train in emergency. Both the engineer and the front brakeman then jumped from the locomotive, just before their train stopped as a result of the emergency brake application. Immediately afterward, at 4:20 a.m., while standing on the main track, the locomotive of No. 30 was struck by Second 31 at a point 1,508 feet south of the Burksville north siding-switch.

The engineer of Second 31 was killed. The front brakeman and flagman of that train, and the engineer of No. 30, were injured.

Second 31, a southbound second-class freight train consisting of 4 diesel-electric units, 83 cars and a caboose, left Venice, Ill., 5.7 miles north of Tolson, at 3:20 a.m. on the day of the accident. Crew members conversed with the engineer before leaving and noticed nothing unusual about his condition. The train passed Tolson, the last open train order office, at 3:46 a.m., 8 hours 36 minutes late. As it passed that point, copies of train order No. 16 were delivered to the locomotive and caboose. All the surviving crew members said they read the order and understood its requirements. The front brakeman said the engineer also read the order and then remarked that "We take the siding over there." This indicated to the front brakeman the engineer was aware that the provisions of order No. 16 required Second 31 to enter the Burksville siding at the north switch to meet No. 30.

As Second 31 was moving in the vicinity of Waterloo, the surviving crew members overheard the engineer inform the front brakeman of No. 30 by radio-telephone as to the location of their train. About the same time, the engineer reduced the speed to approximately 30 miles per hour, in compliance with a train order restricting the speed of trains between the Waterloo south siding-switch and the Burksville north siding-switch. The speed was further reduced to between 20 and 25 miles per hour, according to crew members' estimates, as the train proceeded on an ascending grade located a short distance north of Burksville. The front brakeman stated that when the locomotive was about one mile from the Burksville north siding-switch, the engineer sounded the

whistle signal prescribed for a train approaching a meeting point. The front brakeman said that shortly thereafter, he called the engineer's attention to the requirements of order No. 16, but the engineer did not acknowledge the call. He said that he did not consider this to be unusual, because the engineer never acknowledged any of his calls.

The front brakeman said that as the train neared the Burksville north siding-switch, the engineer took no action to reduce the speed or to stop the train short of that switch. When the locomotive was about 500 feet from the switch, the front brakeman realized there was insufficient braking distance for the train to stop and enter the siding as required. As the locomotive passed the switch, he arose from his seat on the east side of the control compartment and saw the headlight of No. 30 come into view a short distance ahead. At this time, the front brakeman realized a collision was inevitable. He immediately crossed over to the west side of the control compartment and jumped from the locomotive without speaking further to the engineer or taking any action to stop the train. He said the engineer was still in his seat and looking ahead, when he last saw him. A few moments after the front brakeman jumped from the locomotive, Second 31 collided with No. 30 while moving at 20 to 25 miles per hour, as estimated by surviving crew members.

The conductor and flagman of Second 31 said the speed was reduced slightly as their train moved between Waterloo and Burksville and they thought this was done in preparation for entering the Burksville siding. They were not apprehensive as to whether the train would enter the siding as required. Hence, they did not radio-telephone the engineer to confirm his understanding of order No. 16. Both the conductor and flagman said there was no brake application made immediately before the collision. They were unaware of anything being wrong before the train brakes applied in emergency as a result of the collision.

The control compartment of the first diesel-electric unit of Second 31 was destroyed. Thus, the position of the controls at the time of the accident could not be determined. The cars of the train were not derailed. Their brakes were tested after the accident and no exceptions were taken.

An autopsy disclosed no evidence that a physical condition of the engineer contributed to the cause of the accident.

FINDINGS

Train order No. 16 established Burksville as the point for No. 30 to meet Second and Third 31. All the crew members of both trains understood the requirements of the order. It is evident that Second 31 failed to stop short of the Burksville north siding-switch and to enter the siding as required by train order No. 16, causing the collision to occur.

As Second 31 approached the siding at about one mile the engineer sounded the whistle signal prescribed for trains approaching a meeting point, indicating he was aware that his train was required to meet No. 30 at Burksville. A few moments later, the front brakeman called the engineer's attention to the requirements of train order No. 16, but the engineer made no acknowledgment. As the train neared Burksville, the engineer evidently did not control its speed to stop short of the north siding-switch as required, and the front brakeman did not take any action to stop the train as it approached the siding at excessive speed. Second 31 then passed the north siding-switch and collided with No. 30, apparently without the engineer having taken any action to avert the accident. The reason why he failed to stop his train short of the north siding-switch as required, or to take any action to avert the accident, could not be determined.

CAUSE

This accident was caused by failure of the crew of the southbound train to obey a meet order.

*Dated at Washington, D. C., this 28th
day of June 1966.*

*By the Commission, Railroad Safety
and Service Board*

(SEAL)

H. NEIL GARSON

Secretary

APPENDIX

Track

From the north on the main track there are, in succession, a long tangent, a 2°24' curve to the left 768 feet, a tangent 1,967 feet, and a 2°00' curve to the left 841 feet to the collision point and 937 feet southward. From the south there are, successively, a tangent 1,406 feet and the curve on which the collision occurred. The grade for southbound trains is, successively, an average of 1.03 percent ascending 2,400 feet, 0.20 percent ascending 400 feet, 0.66 percent descending 500 feet, and practically level 250 feet to the collision point and a short distance southward.

Carrier's Operating Rules

Section.—One of two or more trains running on the same schedule displaying signals or for which signals are displayed.

Superior Train.—A train having precedence over another train.

14. Engine Whistle Signals

Note.—The signals prescribed are illustrated by "o" for short sounds; "—" for longer sounds. ***

	SOUND	INDICATION

(n)	— — o	Approaching meeting or waiting points. See Rule S-90.

S-72. Trains in the direction specified by the timetable are superior to trains of the same class in the opposite direction.

S-89. At meeting points, the inferior train must take the siding ***

The inferior train must pull into the siding when practicable. If necessary to back in, it must first be protected as prescribed by Rule 99.

S-90. The engineman of each train must sound signal 14(n) not less than one mile before reaching *** a meeting point where by train order the train is to meet or wait for an opposing train.

204. ***

Enginemen and firemen and, when practicable, forward trainmen must read train orders, check with each other and have a definite and proper understanding of their requirements. *** Should there be occasion to do so, trainmen and firemen must remind conductors or enginemen of the contents of train orders.

FORMS OF TRAIN ORDERS

S-A.

Fixing Meeting Points for Opposing Trains.

(1) ***

No 3 eng 113 meet Second 4 eng 114 at B.

Trains receiving these orders will run with respect to each other to the designated points and there meet in the manner prescribed by the rules.

Trains Involved

No. 30 consisted of road-switcher type diesel-electric units 902, 901, 637 and 509, coupled in multiple-unit control, 118 cars and a caboose. As this train approached the collision point, the engineer and front brakeman, the only crew members on the locomotive, were in the control compartment of the first diesel-electric unit. The flagman was in the caboose, and the conductor was walking toward the caboose after lining the Burksville south siding-switch to expedite the anticipated movement of Second 31 through the siding. The train brakes had been tested and had functioned properly when used en route.

Second 31 consisted of road-switcher type diesel-electric units 614, 636, 630 and 622, coupled in multiple-unit control, 83 cars and a caboose. As the train approached the collision point, the engineer and front brakeman, the only crew members on the locomotive, were in the control compartment of the first diesel-electric unit. The conductor and flagman were in the caboose. The train brakes had been tested and had functioned properly when used en route.

Damages

The first and second diesel-electric units of No. 30 were derailed. The first unit overturned to the right and stopped on the east side of, and parallel to, the siding, with the front end 30 feet south of the collision point. It was heavily damaged. The second unit stopped upright on and in line with the main track structure, 32 feet south of the collision point. It was somewhat damaged. The first and twenty-fifth cars were knocked off center, but were not otherwise damaged.

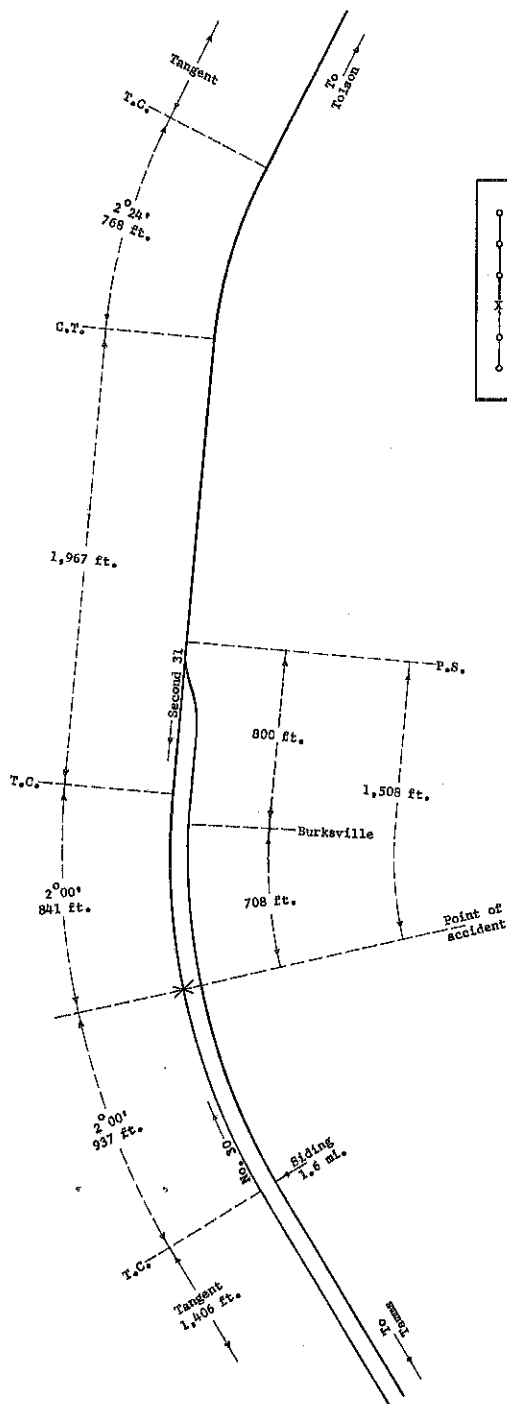
Second 31 stopped with the front end against the front of the second diesel-electric unit of No. 30. The first diesel-electric unit of Second 31 was derailed and stopped upright and in line with the main track structure. It was destroyed. The second unit, which was not derailed, was heavily damaged.

Other Factors

The accident occurred at 4:20 a.m., in clear weather.

The maximum authorized speed for freight trains in the territory involved is 40 miles per hour, but was restricted by train order to 30 miles per hour between the Waterloo south siding-switch and the Burksville north siding-switch.

Gulf, Mobile and Ohio Railroad
Burksville, Ill.
March 20, 1966



- Tolson, Ill. 20.9 mi.
- Waterloo 5.2 mi.
- Burksville 0.3 mi.
- X Point of accident 25.3 mi.
- Sparta 78.4 mi.
- Tama, Ill.

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